

QP CODE: 212327

Reg. No:.....

Second Semester M.Pharm Degree Examinations July 2019

M.Pharm (Pharmaceutics)

Paper II: Advanced Bio-Pharmaceutics and Pharmacokinetics (MPH 202T)

(2017 Scheme)

Time: 3 Hours

Total Marks: 75

- Answer all Questions.
- Draw Diagrams wherever necessary.

Essays

(3x10=30)

1. Discuss the pharmaceutical and patient related factors affecting drug absorption.
2. Describe the purpose of bioavailability study and methods for assessing bioavailability.
3. Derive all possible pharmacokinetic parameters using one compartment model for I V bolus

Short Notes

(9x5=45)

4. *In vitro* dissolution testing methods.
5. Application of pharmacokinetics in targeted drug delivery systems.
6. Drug-product stability.
7. Biosimilar drug products.
8. Gene therapy.
9. Protein binding.
10. Permeability study by *insitu* method.
11. Rate limiting steps in drug absorption.
12. A patient was administered 150 mg per day of phenytoin and the steady state plasma concentration was 8.6 mg / l. When the same drug was administered at 300 mg per day, the steady state plasma concentration was 25.1 mg / l. Find out K_m and V_{max} of the patient
